REMARKS

The Examiner is thanked for the indication in the parent case that independent claim 19 is allowable. Claims 1, 3-9 and 12-18 were subject to a final rejection in the parent case. To address this rejection, a request for continued examination has been submitted under Rule 114, together with this Preliminary Amendment.

To simplify the contested issues, independent claims 3 and 12 have been canceled without prejudice or disclaimer. Claim 1 has been amended as described below, and new claim 20 has been added. Please note that claim 20 is a "computer program product" claim that conforms to claim 1, which is written in a "method" format. Otherwise, the claims are substantially identical. The claims that were dependent from canceled claims 3 and 12 have been amended to change their dependency to claims 1 and 20. No new matter has been introduced.

As the Examiner will appreciate, each of the remaining independent claims now requires that the step (or means for) "assigning an order of importance for the plurality of factors for each agent" be further refined to emphasize that "the order of importance for the plurality of factors for a given agent in the group of agents differs from an order of importance for the plurality of factors for at least one other agent in the group of agents." This subject matter is neither disclosed nor suggested by Castonguay et al. '134, Crockett et al. '355, or Gabriner et al. '403, which were of record in the parent case. In this regard, the Examiner is directed to step 162 in Figure 11 of the '134 patent, together with the accompanying text at Column 19, lines 11-16. In Castonguay et al., each agent uses the same fixed order of preferences. As amended, each of independent claims 1 and 20 now require that the order of importance for the plurality of factors for a given agent "differs" from that of at least one other agent. This subject matter is neither disclosed nor suggested in the art of record. It finds support in the original disclosure, e.g., page 3, lines 13-14, page 8, line 15 ("each agent's preference factors"); page 8, lines 22-23, page 18, lines 6-7, Figures 1-2 generally and accompanying text.

The Examiner argues on pages 2-3 of the most recent Office Action that Castonguay et al. disclose "determining a ranking for each agent from highest to lowest based on given criteria, ... and determining a difference value for each factor between a current schedule and the agent's preference for that factor..." This is incorrect. There is

no disclosure or suggestion in Castonguay et al. of enabling an agent to order preferences, and thus the reference cannot teach the step (or means for) "assigning an order of importance for a plurality of factors for each agent," let alone the further requirement that the order of importance vary as between at least two of the agents in the group of agents.

Further, although the '134 patent is concerned generally with scheduling agents in a contact center environment, the patent does not disclose or suggest the specific computer-implemented technique for automatically assignment a group of agents to a plurality of available schedules positively recited, for example, in claims 1 and 20. In particular, the '134 patent specifically does not teach having an agent determine preferences for a plurality of factors, enabling the agent to assign an order of importance for the factors – with that order being different for at least one agent in the group, determining a ranking for each agent from a highest rank to a lowest rank based on a given criteria, or the step of assigning an agent to a schedule using an iterative vector-based technique (namely, the nested iterative steps (a)(i)-(ii) – (b) as positively recited). Indeed, the Examiner further admits that "Castonguay et al. does not explicitly disclose performing the sub-steps on an iterative basis, from a highest ranked agent to a lowest ranked agent, the sub-steps being assigning the difference valued for each factor to a bit range within a vector for the current agent and current schedule wherein the factor having a highest importance is assigned to a highest order bits of the vector and the remaining factors assigned to subsequent orders of bits in an assigned order of importance, wherein the vector represents a numerical value that indicates how well the current schedule fits the current agent's preferences, ..." (Office action at page 3). In this latter respect, the Examiner is correct, as clearly the '134 patent does not disclose or suggest the computer-implemented method now positively recited.

Crockett et al. '355 do not make up for these admitted deficiencies in the primary reference. As the Examiner again (correctly) notes, the '355 "does not disclose an ordered bit range with the vector." The '355 patent, of course, deals with skills-based scheduling, and it does not disclose or suggest creating schedules based on agent preferences within the meaning of the subject invention. Even if there were some motivation to combine the '134 and '355 patents, which the patents themselves do not provide, the combination would still not include the recited iterative vector-based

selection technique as now set forth in claim 1, steps (a)(i)-(ii) – (b). The Examiner appears to acknowledge this fact through his citation of the Gabriner et al. teaching, which is said to describe the use of a "data preference" vector to facilitate scheduling. With all due respect, the Examiner is asked to reconsider this position, as Gabriner et al. does not teach what the Examiner contends that it does.

In particular, Gabriner et al. state that a scheduling system can be based on hard and/or soft constraints, the former being "rules and requirements" and the latter being "rules and preferences." During the scheduling process, the hard constraints must be honored while the soft constraints need not be. Importantly, the "bit array 30" identified by the Examiner as being analogous to the "numerical value vector" of the claimed invention is only used to encode "hard constraint information" and not preference information. At least for this reason, the "resource bit array" cannot be considered analogous to the recited vector. In this regard, the Examiner should note that Gabriner et al. teach away from the present invention when they go on to describe that the "contents of the resource bit array 30 usually don't change, and can be stored in a permanent database for access by the GA scheduling system." Thus, in contrast to the vector of the present invention, which is created "for each schedule that is available to be assigned to a current agent," the resource bit array is simply a hard-coded, unchanging data structure that identifies "rules and requirements." As the method of claim 1 iterates through its recited processing steps, in fact numerous vectors are created, and these vectors have different numerical values. If they did not, the algorithm would not work. Gabriner's hard-coded resource bit array 30 is something completely different. Stated another way, there is nothing in Gabriner et al. that would disclose or suggest that one of ordinary skill in the art modify either Castonguay et al. or Crockett et al. '355 to derive the specific subject matter now positively recited in claims 1 and 20.

Even if one of ordinary skill were motivated to combine the three references, and there is no evidence of any such suggestion to do so, the combined teachings would still lack the "performing the ... sub-steps on an iterative basis, from a highest ranked agent to a lowest ranked agent" limitation. Nothing in these references would motivate one of ordinary skill to come up with the specific algorithmic steps set forth in each of claims 1 and 20 and, in particular, the iterative processing that generates a given vector value that

indicates how well a current schedule fits a current agent's preferences, and assigning to the current agent the schedule having the lowest numerical value. Without an express disclosure or suggestion of this subject matter "as a whole," the § 103(a) rejection cannot stand.

Claims 1, 4-9 and 13-20 are now deemed in condition for allowance, and a Notice to that effect is respectfully requested.

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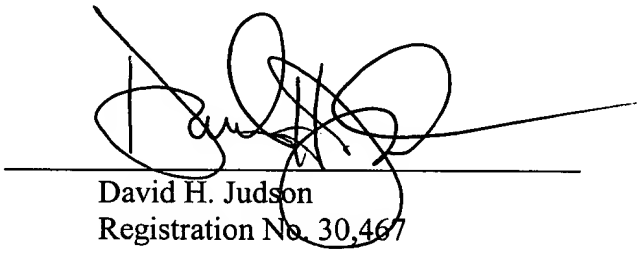

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